

App. Serial No 10/550,741
NL030347US1

10. *(Previously Presented)* A semiconductor device according to claim 6, wherein the second layer of gate material consists of polycrystalline gate material.

11. *(Previously Presented)* A semiconductor device according to claim 6, wherein the grain size in the second layer is below about 40 nm.

12. *(Original)* A semiconductor device according to claim 6, wherein the first layer is crystalline or very fine-grained, with grains below 5 nm.

13. *(Previously Presented)* A semiconductor device according to claim 6, wherein a gate insulator is provided between the semiconductor substrate and the gate electrode.

14. *(Original)* A semiconductor device according to claim 6, wherein the device is a transistor.

15. *(Cancelled)*

16. *(Cancelled)*

17. *(Previously Presented)* A semiconductor device according to claim 6, wherein the first layer of activated crystalline gate material has a doping level of about 5×10^{20} ions/cm³ or higher.

18. *(Currently Amended)* An MIS type semiconductor device according to claim 6, wherein the a doping implant in the activated gate material has an abruptness of a doping profile of about 1.5 nm or more.

19. *(Currently Amended)* An MIS type semiconductor device according to claim 6, wherein the a doping implant in the activated gate material has an abruptness of a doping profile of about 1 nm.

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20. (*Previously Presented*) A semiconductor device according to claim 6, wherein the grain size in the second layer is below about 30 nm.